

Docket No.: 215177 00101
Customer No. 27160

HICKMAN
Application No. 09/575,377

REMARKS

Undersigned counsel thanks Examiner Allen for a personal interview held at the USPTO on November 10, 2004. The interview summary record contains a typographical error indicating that it was a telephonic interview.

The present invention relates to a method for identifying one or more ion channels of a cell that may be affected by a test substance by deconvoluting a change in cell membrane potential. As agreed at the interview, the class of invention has been changed from a system to a method. This change does not affect the Group elected in response to the Restriction Requirement mailed February 26, 2002.

Claims 1 – 27 and 50 are rejected under 37 U.S.C. 112, first paragraph, on grounds that the specification does not provide enablement for all manner of intervening layers encompassed by the claims, and because the terms “high resistance” and “high impedance” appear to have been used inconsistently in the specification.

As now presented the physical location of the intervening layer has been clarified.

With regard to the terms “high resistance” and “high impedance,” these are synonymous in the context of the present invention (Hickman Declaration paragraphs 1 – 4, submitted herewith).

Claims 7, 19 and 27 are rejected 37 U.S.C. 112, second paragraph, as being vague and indefinite.

The claims have been cancelled and rewritten to enhance their clarity.

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Claims 1 -14, 18 - 19, 22 - 27 and 50 are rejected under 35 USC 103(a) as being obvious over Borkholder et al. (US 6,377,057) in view of Hickman et al. (US 2003/0055333).

As now presented, the claims recite a deconvolution analysis, which is not disclosed or suggested by the references.

With regard to benefit of the priority date for the claims, deconvolution is discussed in the priority document (60/135,275) on page 7, lines 4-9 and the last 3 lines, and on page 2, lines 10 - 18, and on page 20, lines 4-9 and 14-16.

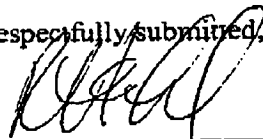
A solid state microelectrode array is described on page 26, section 2.2.3 and on page 2, lines 20 - 24. The claimed intervening layer is described on page 4, 3rd paragraph.

The term "high impedance seal" is supported by the provisional application as follows. It states that "Specific Aim 2 involves localizing the neuronal cells on the microelectrodes of a microelectrode array with surface chemistry to establish a patch-clamp like seal between the cells and the microelectrode." (page 28, lines 22 - 24) Here the phrase "patch-clamp like seal" describes a high resistance or high impedance seal to a person of skill in the art. (Hickman Declaration paragraphs 5 - 6, submitted herewith).

Applicants submit the case is now in condition for allowance.

The Commissioner is authorized to charge the three-month extension of time, or credit any overpayment, to Deposit Account No. 50-1710.

Respectfully submitted,



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Attachment: Petition for Extension of Time

Date: November 26, 2004

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